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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,758	11/19/2003	Jeffrey C. Harp	80107.094US1	6185

7590 02/21/2007  
LeMoine Patent Services, PLLC  
c/o PortfolioIP  
P.O. Box 52050  
Minneapolis, MN 55402

EXAMINER
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HA, DAC V

ART UNIT	PAPER NUMBER
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2611

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/716,758

Applicant(s)

HARP ET AL.

Examiner

Dac V. Ha

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 9-18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 9 recites an "encoder", which does not appear to be in combination with any other means, does not meet the enablement requirement (see MPEP 2164.08(a)).

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 9, 19 is rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al. (US 6,522,699) (hereafter Anderson).

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**Regarding claim 9**, Anderson discloses the claimed subject matter “a reconfigurable partial response encoder to encode and create a spectral notch in the region of a wireless frequency band” in Fig. 3, 4; col. 2, lines 14-19; lines 55-67; col. 12, lines 14-21; col. 14, lines 43-54.

**Regarding claim 19**, see claim 9

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 2-4, 10-18, 20-2-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson.

**Regarding claims 10-18, 20-25**, these claimed subject matter would have been obvious to one skilled in the art as application specific based on Anderson.

**Regarding claim 1**, Anderson discloses “passing data through a reconfigurable partial response encoder to create a spectral notch” in Fig. 4, combination of elements 251, 252; col. 2, lines 14-19; lines 55-67; col. 12, lines 14-21; col. 14, lines 43-54.

Further, Anderson suggests that the “characteristic of the spectral notch” and be different (col. 2, lines 17-21) depending on what the desire is. Therefore, the claimed subject matter “modifying a characteristic ...of the spectral notch” would have been understood by one skilled in the art as application specific.

**Regarding claims 2-4**, these claimed subject matter would have easily realized by one skilled in the art.

**Regarding claim 26**, see claim 1 above. And further, claimed subject matter "a second ... first integrated circuit" would have been design specific to one skilled in the art.

**Regarding claims 27-30**, these claimed subject matter would have been obvious to one skilled in the art as application specific based on Anderson.

7. **Claims 5-8** are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson in view of Schramm et al. (US 6,208,663) (hereafter Schramm).

**Regarding claim 5**, Anderson suggests the teaching "modifying characteristic of a partial response encoder" as indicated above (see claim 1). Schramm discloses modulation/encoding method utilizing a condition received from the connection to improve modulation/encoding (Abstract). Therefore, it would have been obvious to one skilled in the art to incorporate such teaching from Schramm into Anderson to further improve the encoding and provide more flexibility to the system.

**Regarding claims 6-8**, these claimed subject matter would have been obvious to one skilled in the art as application specific based on combination of Anderson Schramm.

### ***Conclusion***

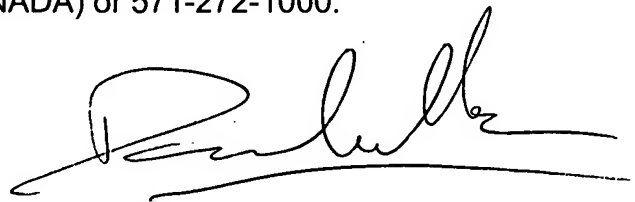
8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Coker et al. (US 6,625,235) discloses Apparatus And Method For Noise-Predictive Maximum Likelihood Detection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dac V. Ha whose telephone number is 571-272-3040. The examiner can normally be reached on 5/4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on 571-272-3086. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in dark ink, appearing to read 'Dac V. Ha', with a horizontal line underneath.

Dac V. Ha  
Primary Examiner  
Art Unit 2611